Complete Summary

TITLE

Adult low back pain: percentage of patients with a diagnosis of back pain for whom the physician ordered imaging studies during the six weeks after pain onset, in the absence of "red flag."

SOURCE(S)

Institute for Clinical Systems Improvement (ICSI). Adult low back pain. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2008 Nov. 66 p. [105 references]

Measure Domain

PRIMARY MEASURE DOMAIN

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the Measure Validity page.

SECONDARY MEASURE DOMAIN

Does not apply to this measure

Brief Abstract

DESCRIPTION

This measure is used to assess the percentage of patients with a diagnosis of back pain for whom the physician ordered imaging studies during the six weeks after pain onset, in the absence of "red flag."

RATIONALE

The priority aim addressed by this measure is to reduce unnecessary imaging in adult patients with low back pain in the absence of "red flag" indicators or progressive symptoms.

PRIMARY CLINICAL COMPONENT

Acute low back pain; x-ray (anterior-posterior [AP], lateral [LAT]); computed tomography (CT) scan; magnetic resonance imaging (MRI); "red flag" indicators (see the "Denominator Inclusions/Exclusions" field in the Complete Summary)

DENOMINATOR DESCRIPTION

Number of patients with acute low back pain who present to clinic with low back pain six weeks or less from onset of pain without "red flag" indicators (see the related "Denominator Inclusions/Exclusions" field in the Complete Summary)

NUMERATOR DESCRIPTION

Number of patients with acute low back pain or sciatica receiving imaging studies: anterior-posterior (AP) or lateral (LAT) x-rays, computed tomography (CT) scan, or magnetic resonance imaging (MRI)

Evidence Supporting the Measure

EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence

NATIONAL GUIDELINE CLEARINGHOUSE LINK

- Adult low back pain.

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Unspecified

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

Internal quality improvement

Application of Measure in its Current Use

CARE SETTING

Physician Group Practices/Clinics

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Physicians

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Group Clinical Practices

TARGET POPULATION AGE

Age greater than or equal to 18 years

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

Unspecified

ASSOCIATION WITH VULNERABLE POPULATIONS

Unspecified

BURDEN OF ILLNESS

Unspecified

UTILIZATION

Unspecified

COSTS

Unspecified

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Getting Better

IOM DOMAIN

Effectiveness

Data Collection for the Measure

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

Adult patients age 18 and over in primary care who have symptoms of acute low back pain or sciatica

Identify patients with acute low back pain using diagnosis codes (see the "Denominator Inclusions/Exclusions" field). Patients should be included if the onset of symptoms was six weeks or less.

The medical record of each patient is reviewed to determine if the patient meets any of the "red flag" indicators (see the "Denominator Inclusions/Exclusions" field). If none of the "red flag" indicators is present, the chart is further reviewed for use of anterior-posterior (AP) or lateral (LAT) x-ray, computed tomography (CT) scan, or magnetic resonance imaging (MRI).

The suggested time period for data collection is a calendar month.

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions
Number of patients with acute low back pain who present to clinic with low back pain* six weeks or less from onset of pain without "red flag" indicators**

*Patients who are within six weeks of onset of low back pain and related symptoms, as identified by the following International Classification of Diseases, Ninth Revision (ICD-9) codes: 720.x, 721.x, 722.x, 724.xx, 847.2, 738.4, 738.5, 738.6, 846.x, 847.2, 847.2, 847.3, 847.4, 847.9.

**Magnetic resonance imaging (MRI) and computed tomography (CT) generally are not useful in the early evaluation and treatment of low back pain or sciatica unless the patient has major or progressive neurological symptoms, or there is a suspicion of cancer or infection.

Generally anterior-posterior (AP) or lateral (LAT) x-rays are not useful in the acute setting but may be warranted with:

- Unrelenting night pain or pain at rest (increased incidence of clinically significant pathology)
- History of or suspicion of cancer (rule out metastatic disease)
- Fever above 38 degrees C (100.4 degrees F) for greater than 48 hours
- Osteoporosis

- Other systemic diseases
- Neuromotor or sensory deficit
- Chronic oral steroids
- Immunosuppression
- Serious accident or injury (fall from heights, blunt trauma, motor vehicle accident) - this does not include twisting or lifting injury unless other risk factors are present (e.g., history of osteoporosis)
- Clinical suspicion of ankylosing spondylitis

Other conditions that may warrant AP or LAT x-rays:

- Over 50 years old (increased risk of malignancy, compression fracture)
- Failure to respond after six weeks of conservative therapy
- Drug or alcohol abuse (increased incidence of osteomyelitis, trauma, fracture)

Exclusions
See "Inclusions" above.

RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are equally eligible to appear in the numerator

DENOMINATOR (INDEX) EVENT

Clinical Condition
Encounter

DENOMINATOR TIME WINDOW

Time window is a single point in time

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions
Number of patients with acute low back pain or sciatica receiving imaging studies: anterior-posterior (AP) or lateral (LAT) x-rays, computed tomography (CT) scan, or magnetic resonance imaging (MRI)

Exclusions
Unspecified

MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

NUMERATOR TIME WINDOW

Encounter or point in time

DATA SOURCE

Administrative data
Medical record

LEVEL OF DETERMINATION OF QUALITY

Individual Case

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure

SCORING

Rate

INTERPRETATION OF SCORE

Better quality is associated with a lower score

ALLOWANCE FOR PATIENT FACTORS

Unspecified

STANDARD OF COMPARISON

Internal time comparison

Evaluation of Measure Properties

EXTENT OF MEASURE TESTING

Unspecified

Identifying Information

ORIGINAL TITLE

Percentage of patients with a diagnosis of back pain for whom the physician ordered imaging studies during the six weeks after pain onset, in the absence of "red flag."

MEASURE COLLECTION

Adult Low Back Pain Measures

DEVELOPER

Institute for Clinical Systems Improvement

FUNDING SOURCE(S)

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FINANCIAL DISCLOSURES/OTHER POTENTIAL CONFLICTS OF INTEREST

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Michael Goertz, MD received speaker's fees from Boston Scientific and Pfizer.

Adam Locketz, MD received speaker's fees from Boston Scientific.

No other work group members have potential conflicts of interest to disclose.

ICSI's conflict of interest policy and procedures are available for review on ICSI's website at www.icsi.org.

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

2003 Sep

REVISION DATE

2008 Nov

MEASURE STATUS

This is the current release of the measure.

This measure updates a previous version: Institute for Clinical Systems Improvement (ICSI). Adult low back pain. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2006 Sep. 65 p.

SOURCE(S)

Institute for Clinical Systems Improvement (ICSI). Adult low back pain. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2008 Nov. 66 p. [105 references]

MEASURE AVAILABILITY

The individual measure, "Percentage of Patients with a Diagnosis of Back Pain for Whom the Physician Ordered Imaging Studies During the Six Weeks After Pain Onset, in the Absence of "Red Flag," is published in "Health Care Guideline: Adult Low Back Pain." This document is available from the Institute for Clinical Systems Improvement (ICSI) Web site.

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NQMC STATUS

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